CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT
CD NO.

50X1-HUM

COUNTRY	USSR	DATE OF INFORMATION	1950 - 1951
SUBJECT	Economic; Technological - Machine tools, precision instruments, electric-spark method		
HOW PUBLISHED	Daily newspapers	DATE DIST.	18 May 1951
WHERE PUBLISHED	USSR	NO. OF PAGES	5
DATE PUBLISHED	11 Jan - 2 Mar 1951		
LANGUAGE	Russian	SUPPLEMENT TO REPORT NO.	

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers as indicated.

INTRODUCE NEW MACHINING METHODS

MODEL WORKER BECOMES PLANT DIRECTOR -- Moscow, Vechernyaya Moskva, 7 Feb 51

A photograph of a short young man, wearing a cap and holding a saw in a fitter's vise, hung for a long time at one of the pavilions at the Central Park of Culture and Recreation imeni Gor'kiy. This was Arkadiy Vorob'yev who for 2 decades has been considered one of the best workers at the Krasnyy proletariy Plant.

During that time, this plant and the young fitter have made outstanding progress. The Krasnyy proletariy Plant has become the largest machine-tool-building plant and the former fitter, Vorob'yev, its director.

At present, it is difficult to compare this gigantic machine-tool-building plant with the small plant that at one time belonged to Bromley, an Englishman. Suffice it to say that in comparison with 1913, its production has increased more than 100 times. The kind of products that Bromley produced can be identified from tales told by elderly workers and this firm's catalogs that have been filed. Bromley offered axes, saw frames, and universal lathes which operated at a speed of 150 revolutions per minute. It would not be appropriate to place such a machine alongside the latest machine which operates at a speed of 3,000 revolutions per minute.

Vorob'yev's whole life has been connected with the Krasnyy proletariy Plant. As a small boy, he attended the plant's apprentice school and it was here, the year of Lenin's death, that he entered a Pioneer organization. He became a Komsomol at the plant. He was prepared for joining the party by the plant Komsomol. At that time the production of the DIP machine tool had just started. Fitter Vorob'yev worked on the development of this new machine. The fitters' brigade, led by Vorob'yev, was one of the best at the enterprise.

It is interesting to note the road taken by members of his brigade. Aleksey Volkov is at present an engineer and worker with the Ministry of Machine-Tool Building; Nikolay Kutarenkov is also an engineer, as well as an associate of the Gosplan USSR.

Many of us remember the dismal days when capitalism trampled and choked the talents of the people. The one-time owner of this plant, Bromley, was afraid to trust even a foreman's position to a Russian. At this plant and at many other Moscow enterprises at that time, the foreman's position was filled by an Englishman or even a Frenchman. In the Soviet Union, all roads are open. Study, grow, and advance!

Fitter Vorob'yev became a foreman, then chief of the assembly shop. The party organization sent him to study at the All-Union Industrial Academy. He returned to his native plant with the diploma of mechanical engineer.

Engineer Vorob'yev headed the tool and then the machine shop. He was assigned to the most difficult and responsible sections. During the war, he was sent far to the rear to set up the production of tools. Upon his return to the plant, he received new responsible assignments.

Having become the head of the plant in 1946, Arkadiy Ivanovich has been doing a great deal in the conversion of machine-tool production to conveyer methods.

At present, not only are lathe operators working at high speeds, but also milling-machine, drilling-machine, and even grinding-machine operators are changing to high-speed methods of metalworking. The day is not too far off when the entire plant will be working at high-speed methods.

Director A. I. Vorob'yev has expended a great deal of energy within the walls of the Krasnyy proletariy Plant in the development of a machine tool for threading lead screws. This machine produces screws to an accuracy of 4 microns. Soviet industry will receive these superprecision machine tools bearing the "Krasnyy proletariy" mark in 1951.

The 1951 aim of the plant is to become a Stakhanovite enterprise. Thus far, 26 shops of the plant have received the honorary title of Stakhanovite.

Vorob'yev has been particularly attentive to the training of workers to become technical experts. At present, nearly all plant personnel are engaged in some type of technical study. This includes the rank-and-file worker, fitter, and foreman. The Soviet plant today is a big school.

It was not long ago that only a few machines emerged from this plant. At present, there is not an enterprise in the country where a machine tool bearing the "Krasnyy proletariy" mark cannot be found. -- B. Kirillin, chief, second assembly shop; Ye. Bakanichev, foreman; V. Yermilov, fitter

TECHNOLOGY LAGS BEHIND PLANT DEVELOPMENT -- Moscow, Moskovskaya Pravda, 4 Feb 51

The Moscow Grinding-Machine Plant produced 60 new models of machine tools during the postwar Five-Year Plan.

During these years, its growth was not due to expansion of its production base but as a result of continuous increase in labor productivity and better utilization of basic facilities. During this time, 46 cranes were assembled, nearly all sand conditioning at the plant's foundry was mechanized, and 52 percent of all the plant's casting was converted to machine molding. Many new technological processes such as shaving, the manufacture of hob cutters with ground profile, bimetallic current conductors, milling of long, deep, and narrow graduated grooves, etc., were introduced.

50X1-HUM

Among the new models produced is a heavy machine tool designed for grinding machine-tool ways and tables of up to 8 meters in length. Parts can be ground to a tolerance of 0.03 millimeter.

During the current year, the plant is faced with more complex problems. The most important task will be to strengthen the plant's technological services.

During the years of the postwar Five-Year Plan, the number of designers increased considerably, and the types of new machine tools increased yearly; however, the technological section remained unchanged. As a result, plans for production were delayed and haphazard technology was employed. This noticeably reduced the efficiency of all personnel.

A great deal of time is wasted in waiting for drawings and tools, searching for necessary equipment, waiting for blanks, etc.

More rhythmic production must also receive concentrated attention. -- V. Glukharev, director

NEW METHOD SPEEDS MACHINING; GIVES HIGH FINISH -- Leningradskaya Pravda, 31 Jan 51

Engineer B. M. Askinazi of the Leningrad Kirov Plant has suggested that heat by means of electric current be applied simultaneously to parts while they are machined on lathes. This speeds up the machining process and gives the work pieces a highly finished surface. In addition, the machine tool requires only a slight amount of modernization.

Cast-iron bushings for trailer tractors are already being machined by this new method at the Kirov Plant.

INTRODUCE CENTERLESS GRINDING OF CYLINDRICAL DRILLS -- Moscow, Vechernyaya Moskva, 10 Feb 51

During 1950, more than 50 tons of high-speed and structural steel, and 200,000 kilowatt-hours of electric power were saved, 50 metal-cutting machine tools were modernized, and 75 devices, special instruments, dies, etc., were put into production at the Moscow Frezer Plant imeni M. I. Kalinin.

Among the most effective suggestions made was that of A. Pyatibratov concerning centerless grinding of cylindrical, hard-alloy-tipped drills. This considerably increased labor productivity and improved the quality of the product.

ADDITIONAL FEEDS NECESSITATE OUTSIDE FEED BOX -- Moscow, Vechernyaya Moskva, 13 Feb 51

At the Moscow Frezer Plant imeni M. I. Kalinin, 25 milling machines were modernized by increasing the number of feeds. To accomplish this, the diameter of the driving gear in the feed box had to be increased. Difficulty was encountered because the size of the feed box was too small to house the enlarged gear. The problem was solved by taking the feed box out of the machine and making special extension pieces on the shaft for this purpose. New conditions for cutting were worked out for this modernized machine.

50X1-HUM

MODERNIZE MACHINE TOOLS -- Alma-Ata, Kazakhstanskaya Pravda, 2 Mar 51

Fifty metal-cutting machine tools have been modernized at the Moscow Frezer Plant imeni M. I. Kalinin.

1950 SUCCESSFUL YEAR FOR TBILISI PLANT -- Tbilisi, Zarya Vostoka, 11 Jan 51

During 1950, the Tbilisi Stanok Machine-Tool-Building Plant achieved notable success. Seventy percent of all cutting tools used were hard-alloy tipped the electric-spark method of hardening cutting tools was introduced; existing models of machine tools were modernized for conversion to high-speed methods of metalworking.

In addition, a new thread-generating machine was designed. It was demonstrated at an international exhibition in Poznan'. At the end of the third quarter, a hydraulic thread-generating machine was produced for the first time in the Soviet Union. In technical features, it is claimed to be better than any other similar machine produced by foreign firms.

START PRODUCTION OF NEW AUTOMATICS -- Moscow, Vechernyaya Moskva, 10 Feb 51

During the past few months the Moscow Machine-Tool Plant imeni Ordzhonikidze has started the production of powerful high-speed machine tools. In particular, new models of multispindle universal automatics for machining bar stock have been released. This type of automatic operates at a speed of up to 2,330 revolutions per minute, which is double the speed of those produced earlier.

Single-spindle, multitool semiautomatics produced by this plant are already being used in industry.

OUTPUT OF MACHINE TOOLS INCREASES -- Tbilisi, Zarya Vostoka, 22 Feb 51

Production of metal-cutting machine tools in Georgia during 1950 was 337 percent higher than during 1940, according to a speech made at the 20th Tbilisi City Party Conference.

PUTS OUT NEW MEASURING INSTRUMENTS -- Leningradskaya Pravda, 7 Feb 51

During the past year, the Leningrad Tool Plant has started the production of 15 new instruments such as minimeters, gear gauges, multimeasuring and checking and sorting automatics for the bearing, automobile, and tractor industry.

TO SERIES-PRODUCE PRECISION MEASURING INSTRUMENTS -- Moscow, Vechernyaya Moskva, 28 Feb 51

In December 1950, the Moscow Tool Plant produced the first models of two types of precision measuring instruments. One is for measuring gears and the other for checking parts for high-precision machine tools.

Plant personnel are now faced with the problem of putting these instruments into series production. It is being successfully worked out by senior designer Sabinin and technologists Kudryavtsev and Starobinets.

Among other advancements made at this plant is a new method of brazing hard alloy onto multilipped tools.

At present, several designers and students are working on the development for high-speed grinding.

- E N D -